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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/776,537 | 02/12/2004 | Chia-Po Lin | 3313-1117P | 4148 |
| 2292 | 7590 | 09/25/2006 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | PUNNOOSE, ROY M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2877 | |

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|----------------------------|--|
| Office Action Summary | Application No. 10/776,537 | Applicant(s) LIN ET AL. | |
| | Examiner Roy M. Punnoose | Art Unit 2877 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 9-13 is/are rejected.
- 7) ☒ Claim(s) 2-8 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>5/12/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claim1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The multiple use of “and/or” clause has made the claim vague and indefinite.

Appropriate correction is required.

3. Claim10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation “one of the optical module and the carrier moves in the first direction, and the other moves in the second direction” is confusing because it is not clear what “the other” is referring to. Also, it appears that the optical module and the carrier (line 1 of claim 10) forms one single part, and they move together in a first direction. Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. The 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 9-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

6. Claim 9 is rejected because it is claiming a non-tangible result. In claim 1, merely comparing the image data with a plurality of pre-defined patterns would not appear to be

Art Unit: 2877

sufficient to constitute a useful, concrete and tangible result, since the outcome of the comparing step has not been used in a disclosed practical application nor made available (in the claim) in such a manner that its usefulness in a disclosed practical application can be realized. See OG Notices: 22 November 2005, "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility".

The applicant is requested to determine whether the claimed invention complies with the subject matter eligibility requirement of 35 U.S.C. Sec. 101, sentence 3, in the OG Notice from 22 November 2005, which states "In determining whether the claim is for a practical application, the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible, and concrete."

7. Claims 10-13 are rejected for reasons similar to the reasons of rejection of claim 1 above because they are not claiming a useful, concrete and tangible result and therefore are directed to non-statutory subject matter. Claims 10-13 comprise intermediate step(s) in the method of claim 9.

Note: Note that claim 14 has "useful, tangible, and concrete" result because it recites "producing a comparison result" as the final step/result.

Allowable Subject Matter

8. Claims 1 and 10 would be allowable if amended to overcome the 35 U.S.C. 112 rejections above.

9. Claims 9-13 would be allowable if amended to overcome the 35 U.S.C. 101 rejections above.

Art Unit: 2877

10. Claims 2-8 and 14 are objected to as being dependent upon a rejected base claim(s), but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, or if the base claim is amended to overcome the rejection.

11. Claims 1 and 9 would be allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious an apparatus and method for analyzing reflection images from microarray biochips comprising, moving an optical module and a carrier carrying a plurality of biochips thereon respectively in a first direction and a second direction to achieve relative movement and retrieve images data from all the biochips, in combination with the rest of the limitations of the respective claims.

Contact/Status Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Roy M. Punnoose** whose telephone number is **571-272-2427**.

The examiner can normally be reached on 9:00 AM - 5:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Gregory J. Toatley, Jr.** can be reached on **571-272-2800 ext.77**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 2877

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 17, 2006


Roy M. Punnoose
Patent Examiner
Art Unit 2877